

Docket No.: 12810-00137-US
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Markus Frank et al.

Application No.: Not Yet Assigned

Confirmation No.: N/A

Filed: Concurrently Herewith

Art Unit: N/A

For: METHOD FOR INCREASING RESISTANCE
AGAINST STRESS FACTORS IN PLANTS

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

Of the documents listed on the attached SB/08 are the documents cited in the International Search Report and International Preliminary Examination Report during the prosecution of international application no. PCT/EP2004/002436, which corresponds to the above referenced application, and in accordance with 37 CFR 1.97(b)(3), Applicants hereby submit these documents for the Examiner's consideration. A copy of each reference on the PTO/SB/08 required under 37 CFR 1.98(a)(2) are enclosed.

This statement is not to be interpreted as a representation that the cited documents are material, that a search has been conducted, or that no other relevant information exists. Nor shall the citation of any document herein be construed *per se* as a representation that such document is

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prior art. Moreover, Applicants understand the Examiner will make an independent evaluation of the cited documents.

Applicant believes no fee is due with this Information Disclosure Statement. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 12810-00137-US. A duplicate copy of this paper is enclosed.

Dated: *Sept. 8, 2005*

Respectfully submitted,

By 

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PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

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| Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | | Complete if Known | |
| | | | | Application Number | Not Yet Assigned 15 487 48 |
| | | | | Filing Date | Concurrently Herewith |
| | | | | First Named Inventor | Markus Frank |
| | | | | Art Unit | N/A |
| | | | | Examiner Name | Not Yet Assigned |
| Sheet 1 of 2 | Attorney Docket Number | 12810-00137-US | | | |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-----------------------|---|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number Number-Kind Code ² (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | AA* | US-2003/0009785 | 01-09-2003 | Reed | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|-----------------------|--|--------------------------------|---|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document Country Code ³ - Number ⁴ -Kind Code ⁵ (if known) | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | BA | EP-0 864 650 | 09-16-1998 | Director General of National Institute of Agrobiological Resources, Ministry of Agriculture, Forestry and Fisheries, Japan | | |
| | BB | WO-00/26391 | 05-11-2000 | University of Nebraska-Lincoln | | |
| | BC | WO-02/101079 | 12-19-2002 | Pioneer Hi-Bred International Inc. | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS | | | | |
|---------------------------------|-----------------------|--|----------------|--|
| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² | |
| | CA | Lincoln, J. et al., "Expression of the Antiapoptotic Baculovirus p35 Gene in Tomato Blocks Programmed Cell Death and Provides Broad-Spectrum Resistance to Disease", Proceedings of the National Academy of Sciences of the U.S., Vol. 99, No. 23 (2002), pp. 15217-15221. | | |
| | CB | Hückelhoven, R. et al., "Overexpression of Barley BAX Inhibitor 1 Induces Breakdown of <i>mlo</i> -mediated Penetration Resistance to <i>Blumeria graminis</i> ", Proceedings of the National Academy of Sciences of the U.S., Vol. 100, No. 9 (2003), pp. 5555-5560. | | |
| | CC | Chae, H-J. et al., "Evolutionarily Conserved Cytoprotection Provided by Bax Inhibitor-1 Homologs From Animals, Plants, and Yeast", Gene, Vol. 323 (2003), pp. 101-113. | | |
| | CD | Shirasu, K. et al., "Regulators of Cell Death in Disease Resistance", Plant Molecular Biology, Vol. 44 (2000), pp. 371-385. | | |
| | CE | Xu, Q. et al., "Bax Inhibitor-1, A Mammalian Apoptosis Suppressor Identified by Functional Screening in Yeast", Molecular Cell, Vol. 1 (1998), pp. 337-346. | | |
| | CF | Roth, W. et al., "Apoptosis and Cancer: When BAX is TRAILing Away", Nature Medicine, Vol. 8, No. 3 (2000), pp. 216-218. | | |
| | CG | Kawai, M. et al., "Evolutionally Conserved Plant Homologue of the Bax Inhibitor-1 (BI-1) Gene Capable of Suppressing Bax-induced Cell Death in Yeast", FEBS Letters, 464 (1999), pp. 143-147. | | |
| | CH | Sanchez, P. et al., "AtBI-1, A Plant Homologue of Bax Inhibitor-1, Suppresses Bax-induced Cell Death in Yeast and Is Rapidly Upregulated During Wounding and Pathogen Challenge", The Plant Journal, Vol. 21, No. 4 (2000), pp. 393-399. | | |
| | CI | Kawai-Yamada, M. et al., "Mammalian Bax-induced Plant Cell Death Can Be Down-Regulated | | |

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| Examiner Signature | Date Considered |
|--------------------|-----------------|

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| | | | | First Named Inventor | Markus Frank |
| | | | | Art Unit | N/A |
| | | | | Examiner Name | Not Yet Assigned |
| | | | | Attorney Docket Number | 12810-00137-US |
| Sheet | 2 | of | 2 | | |

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| | | by Overexpression of <i>Arabidopsis Bax Inhibitor-1 (AtBI-1)</i> ", Proceedings of the National Academy of Sciences of the U.S., Vol. 98, No. 21 (2001), pp. 12295-12300. | |
| | CJ | Hückelhoven, R., " <i>Hordeum vulgare</i> mRNA for BAX Inhibitor-1 (pBI-1 Gene)", GenBank Accession No. AJ290421, 01/18/2002. | |
| | CK | Kawai, M. et al., " <i>Oryza sativa</i> BI-1 mRNA for Bax Inhibitor-1, Complete cds.", GenBank Accession No. AB025926, 12/02/2004. | |
| | CL | Kawai, M. et al., " <i>Arabidopsis thaliana</i> AtBI-1 mRNA for Bax Inhibitor-1, Complete cds.", GenBank Accession No. AB025927, 12/01/2004. | |
| | CM | Bolduc, N. et al., " <i>Nicotiana tabacum</i> Bax Inhibitor 1 (BI-1) mRNA, Complete cds.", GenBank Accession No. AF390556, 01/30/2003. | |
| | CN | Bolduc, N. et al., " <i>Brassica napus</i> Bax Inhibitor 1 (BI-1) mRNA, Complete cds.", GenBank Accession No. AF390555, 01/30/2003. | |
| | CO | Bolduc, N. et al., "Molecular Characterization of Two Plant BI-1 Homologues Which Suppress Bax-induced Apoptosis in Human 293 Cells", Planta, Vol. 216 (2003), pp. 377-386. | |
| | CP | Hückelhoven, R. et al., "Differential Expression of Putative Cell Death Regulator Genes in Near-Isogenic, Resistant and Susceptible Barley Lines During Interaction with the Powdery Mildew Fungus", Plant Molecular Biology, Vol. 47 (2001), pp. 739-748. | |
| | CQ | Matsumura, H. et al., "Overexpression of Bax Inhibitor Suppresses the Fungal Elicitor-induced Cell Death in Rice (<i>Oryza sativa</i> L.) Cells", The Plant Journal, Vol. 33 (2003), pp. 425-434. | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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